ELECTRICAL (EL)
PRE-UNDERWAY PHASE
DDG 51

3241	SHIPS SERVICE GAS TURBINE GENERATORS
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Test Dead Bus Pick-Up **NOTE:** GTG Circuit breakers will not close automatically.	A-10 (51-78) A-16 (79+)
Test Reverse Power Relays	3113 R-18 (51-78) A-17R (79+)
Test Auto Paralleling Device	A-8R (55-58) A-9R (59+)
Test Parallel Operation	IAW EOP
Test Fault Current Detect	A-11R (51-54) A-12R (55-58) A-14R / A-15R (79+)
Test Manual Load Shedding	18M-3

3140	400 HERTZ DISTRIBUTION SYSTEM (CONVERTERS)
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Test Split and Parallel Operation	IAW EOP / CSOSS

4221	TELL-TALE PANEL/NAVIGATION SIGNAL LIGHT PANEL
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Test Navigational Lighting Panel	R-2
Measure insulation resistance of Navigational Lighting Panel.	S-1
Measure insulation resistance of Signal Light Panel.	S-1

4331	ANNOUNCING SYSTEMS
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Test General, Chemical, and Collision Alarms from all stations	Q-1R
Test 1MC from all stations	Q-1R A-1
Test 5MC Operation	Q-2R
Test 21MC Operation	Conduct Operational Test

4751	DEGAUSSING SYSTEM
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Conduct Linearity Test	Q-1
Conduct ground test.	M-2
Inspect Degaussing Folder	NAVSEA TECH MANUAL

3241	AUTOMATIC BUS TRANSFER EQUIPMENT
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Test all Engineering ABTs	Q-2R
Test all remaining ABTs. (Day 2)	Q-2R / S-4R

4371	RO UNITS
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Test dump valve operation	S-2
Test alarms/settings	S-2

4373	WIND INDICATING SYSTEM
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Test System For Proper Operation	R-1M

5081	THERMAL IMAGING SURVEY
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Commence Thermal Imaging Throughout The Ship **NOTE**: Any equipment surveyed that has a temperature rise of 40 degrees centigrade or above (3 or 4 star) must be repaired or tagged out prior to getting underway. The items will not be available until repairs are completed and re-shot for verification	R-1 / R-2
2521	**UNINTERRUPTED POWER SUPPLIES (UPS)**
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Test EPCC for Proper Operation.	A-3
Test PACC for Proper Operation.	A-2
Test SCU-1 for Proper Operation.	A-6
Test SCU-2 for Proper Operation.	A-6

ELECTRICAL (EL)
UNDERWAY PHASE

NOTE: Electrical Underway Checks Consist Mainly Of Space Walk-Through Throughout The Ship.

In each space inspect the following if applicable:

(INSPECT) FUSE BOXES

COMPONENT/SYSTEM	PROPOSED PROCEDURE
Are fuses pulled from designated circuits without danger tags affixed?	NSTM 300 - 2.4.1
Are there loose or missing locking nuts or gear adrift?	NSTM 300 – 4.8.1
Are circuits properly labeled for easy identification?	GSO 305E
Are there any bent, twisted, misaligned, or broken fuse clips?	NSTM 300 4.8.1
Is the interior rusty or dirty?	NSTM 300 – 4.8.1/5.2.4
Are fuses of the correct amperage and voltage installed?	GSO 303F NSTM 320 – 1.7.4
Are circuits fed from one set of fuses (except battle lantern circuits) multiple?	GSO 331C
Are fuse clips phosphor-bronze instead of silver plated?	NSTM 300 – 4.8.1.2
Were door hinges broken?	5100.19 SERIES NSTM 300
Are non-silver ferruled fuses installed?	NSTM 300 - 2.5.4
Are circuits over fused?	NSTM 300 – 2.5.4
Is clearance provided to permit complete accessibility for maintenance, repair, renewal of fuses, and testing?	GS0 300D

(INSPECT) BATTLE LANTERNS

COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were relay-operated lanterns installed in sufficient number?	NSTM 330 – 1.6.4.3.3.1
Are lanterns installed with suitable bracket assemblies to prevent removal of lantern?	NAVSEA 0964-000-2000 NSTM 300
Were lanterns inoperative?	NSTM 330 – 3.6.2
Were test switches and relay frames grounded?	NSTM 330 – 2.1.8

(INSPECT) BATTLE LANTERNS (CON'T)

COMPONENT/SYSTEM	PROPOSED PROCEDURE
Were lanterns located in explosion proof enclosures (prohibit)?	NSTM 330 – 1.6.4.3.2.2
Were NEALS lanterns installed and were they charged (red indicator)?	NSTM 330 – 1.6.4.3.2
Were relay operated lanterns fused?	NSTM 330 – 1.6.4.3.3.3

(INSPECT / TEST) SHORE POWER SYSTEM

COMPONENT/SYSTEM	PROPOSED PROCEDURE
Is shore power being properly rigged?	NSTM 320-2.2.7
Did shore power shunt trip interlocks trip its associated breakers when tested?	IAW PMS IAW EOSS GSO 320D
Was shore power system cabling between the receptacles and the ship's switchboard insulation resistance within EOSS or PMS Limits	SPRU NSTM 300/320
Were shore power indicating lights operative, white in color, and all screws installed?	NSTM 320 – 2.2.9
Were warning signs posted?	GSO 070H
Was there pigtail stowage installed?	GSO 320D
Does the shore power system meet the current standards: - Have a Viking Connector System - Have AQB-LF400 Amp Circuit Breaker with shunt trip - Have a phase sequencing and phase orientation devices. - Have installed ammeter and selector switch to monitor total shore power current.	GSO 320D

(INSPECT) CATHODIC PROTECTION SYSTEM	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Was the installed Cathodic Protection System operative and adjusted	GSO 633C
Were the rudder grounding straps made of 1-1/2 inch wide braided copper and brazed to the rudder stock and the hull?	NSTM 633 – 3.3.2.7 GSO 633C
Has the system been turned off greater than 15 days?	GSO 633G
Was brush rigging correctly installed?	NSTM 633- 3.3.2.6
Were shaft grounding brushes correctly installed?	NSTM 633 ICCP Tech Manual
Did shaft grounding brushes exhibit full contact with the slip ring?	NSTM 633 – 3.3.2.6 ICCP TECH MANUAL
(INSPECT / TEST) ALARM SYSTEMS	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Test alarm switchboards and panels.	4351/Q-2
Were any alarm and warning systems inoperative or missing parts?	GSO 433J
(INSPECT) ORDER/INDICATING/METERING SYSTEMS	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Were Tank Level Indicators (TLI's) out of calibration or inoperative?	GSO 437 E
Were valve position indicator circuits misadjusted or inoperative?	GSO 430H
Were there missing or inoperative salinity cells?	GSO 531B IAW PMS
MOTOR CONTROLLERS	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Were interiors dirty, rusty, deteriorated, or contained gear adrift?	NSTM 302-3.3.2 GSO 320F
Were wiring diagrams, schematics or overload heater tables missing?	NSTM 302-3.3.1

MOTOR CONTROLLERS (CON'T)	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Was controller electrical wiring properly banded?	ELECT PLT. INST. STD METHODS/GSO 302F
Were Start, Stop, "Emergency Run" or Reset buttons seized, missing or inoperative?	3001/S-1/18M-1
Were rubber boots cracked, torn or missing?	NSTM 300-3.2.2 3001/S-1/18M-1
Were overload relay heaters properly sized and adjusted to provide adequate protection for the motor?	NSTM 302-3.3.2 GSO 302G
Were switches protected against inadvertent activation?	GSO 070H
Were controllers with multiple power sources properly labeled?	GSO 305C
Were motor foundations properly preserved?	GSO 631J
Were controllers and remote operating stations properly labeled?	GSO 305C
Is clearance provided to permit complete accessibility for operation, maintenance, repair, renewal of fuses, and testing?	GSO 300D
WORKBENCHES	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
- Does the workbench conform to standards set forth in NSTM 300 APP H? (Insulation, ground straps, disconnect switches, labeling, ground connections, etc)	NSTM 300 GSO 320E GSO 665 GSO 650
(INSPECT) ELECTRICAL SAFETY	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Were flat irons a high-grade commercial type with a three pronged cord?	NSTM 300-2.7.3.6 GSO 640G

Were Ironing Board Stations in berthing space modified to remove spotlight and fill the access hole? Ensure irons are not hardwired.	GSO 640G
(INSPECT) ELECTRICAL SAFETY (CON'T)	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Have shorting probes been modified by installing a nylon screw in the end of the probe and soldering the clip to the conductor?	NAVELEX 0101, 110A FIG 1-3 IAW PMS
Are portable tools/devices not stamped "Double Insulated" or equipped with a three pronged cord?	NSTM 300-2.7.3.3 IAW PMS
Were Hospital grade plugs used on portable equipment?	NSTM 300-2.7.3.2.8
Were light fixtures, guards, and covers securely mounted?	NSTM 300-4.3.3
Were over-sized lamps installed in lighting fixtures?	NSTM 330-2.2.4 NSTM 330-2.2.9
Were light fixtures missing lenses, protective guards, or faceplates?	NSTM 330-2.1.4 NSTM 330-2.2.6
Did diesel module room have adequate lighting?	GSO 331B GSO 332E
Were spray-tight fixtures adequately protected against water intrusion?	NAVSEA 0964-000-2000
Was bunk lighting cable hanging, or not routed through the inside of bunk stanchions?	NAVSEA 0964-000-2000
(INSPECT) CABLING	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Was PVC cabling installed (new construction only)?	GSO 304D
Were dead-ended cables properly identified/terminated?	NSTM 300-4.6.7 GSO 304E NSTM 300-4.6.9 DOD-STD-2003-1
Were useless or improperly installed cables removed?	NSTM 300-4.6.7.1 GSO 304E
Was cabling properly supported, routed or were nylon wire ties being utilized?	GSO 304E

(INSPECT) CABLING (CON'T)	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Were cables pulling out of equipment?	GSO 331E
Were cables improperly spliced?	GSO 304E NSTM 300-4.6.8 DOD-STD-2003-1
Were cables protected against being handholds or being stepped on?	GSO 304E
Was cabling run through beams without the use of chaffing rings?	NSTM 300 TABLE 300-4-4 GSO 304E
Was cabling running through metal partitions equipped with grommets?	GSO 304E NSTM 320-1.6.11
Were cable stuffing tubes properly assembled ?	NSTM 300-4.6.10.1 NSTM 300 TABLE 300-4-4 NSTM 320-1.6.11 GSO 304E
Were multiple cables running through one stuffing tube?	GSO 304E NSTM 300 TAB. 300-4-4
Were multi-cable penetrators installed in Flammable Liquid Storerooms?	GSO 304E MIL-STD-1310
(INSPECT) BUS TRANSFER EQUIPMENT	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Were ABT's installed for the following: - Emergency Lighting. - IC Switchboard and panels. - Steering power panel. - Pumps associated with the main and auxiliary machinery plant having Low Voltage Release (LVR) control. - Fire pumps. - Fire extinguishing auxiliaries and controls.	NSTM 320-1.3.2 GSO 320D
Did ASCO ABT transfer switches have an electrical charge on the metal screw on the manual operator?	NAVSEA FSC SER 03E2/03E2-234
Was the sliding interlock on manual bus transfer switches effective at preventing both breakers from being closed at the same time?	NSTM 300-4.8.4.2

Are feeder circuit breaker megger holes blanked off?	NAVSEA 230319ZNOV 98
Were Normal/Alternate source indicating lights operative?	NSTM 320-2.2.6.4
(INSPECT) SHIP TELEPHONE SYSTEM	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Was the system unreliable due to unresolved software or hardware deficiencies?	NSTM 430-3 GSO 432
Test battery back-up for telephone system	NSTM 313-2.5 GSO 313J
(INSPECT) MOTORS	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Were motor foundations properly preserved?	NSTM 300- 5.4.3.10 GSO 631J
Was resilient mounted electrical equipment groundedto the ships hull through ground straps?	NSTM 300- 2.2.1
Did electrical rotating machinery have ball check grease fittings (zerk fittings) installed?	NSTM 244
Were coupling, belt, or chain guards effective?	GSO 320E
POWER PANELS	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Do labels specify the proper information?	GSO 305E
Do Breaker ratings match the circuit label current rating?	GSO 305E
Are multi-phase circuits missing breaker connecting handles?	GSO 324C
Were power panels located inside galley spaces?	GSO 320E
Is clearance provided to permit complete accessibility?	GSO 300D
CASUALTY POWER CABLES	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Were cable ends properly terminated?	GSO 304E NSTM 320-3.4.1 DOD-STD-2003
Were cables deteriorated from age, heat, and humidity?	NSTM 079-47.4.2.2.10
Were normally energized power terminals labeled?	NSTM 320-1-2-8-2 GSO 320G

Were racks properly identified as to number/length of cables assigned to the rack?	GSO 305F
CASUALTY POWER CABLES (CON'T)	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Is there a label attached at the end of the cable to indicate the length and stowage rack number?	GSO 305F DOD-STD-2003
Are cable leads properly identified for phase identification?	NSTM 320-1.2.8.2
Were cable ferrules missing or heavily oxidized?	NSTM 079-47.4.2.2.6
Was an improper number/length of cable installed on a cable rack?	NSTM 079-47.5.6.1 GSO 320G
Were wrenches missing from terminals?	NSTM 079-47.4.2.3.3
Were covers installed on power terminals?	NSTM 079-47.4.2.3.4 NSTM 079-47.4.2.3.6 GSO 320G
ELECTRICAL DISTRIBUTION EQUIPMENT	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Was electrical distribution equipment securely mounted?	NSTM 300-4.3.3 GSO 300D
Electrical distribution equipment have loose or missing covers?	NSTM 300-4.3.3
Were control knobs or fasteners missing from electrical equipment?	NSTM 300-4.3.3
Was electrical equipment protected from water intrusion?	NSTM 300-4.4.1 NSTM 300-4.4.5
Is electrical properly mounted or was it suspended solely by electrical cables?	NSTM 300-4.3.3
Were 440 multipurpose outlets properly phased?	NSTM 320-1.4.1
Did Standard Navy Receptacles (SNR) and Multi-Purpose Outlets (MPO) have an interlock switch or was the switch function such that the plug could not be removed from an energized receptacle?	NSTM 320-1.4.1
Were electrical receptacles broken or damaged?	NSTM 300-2.7.6
Were 400HZ AC, 60HZ AC, and DC convenience	GSO 320

outlets labeled to prevent equipment being used with the wrong frequency?	
SOUND POWERED TELEPHONE SYSTEMS	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Were any Sound Powered Circuits below 50,000 ohms resistance to ground?	GSO 432I
Were Sound Powered Call Signal Stations (growlers) inoperative, corroded, damaged or missing parts?	NSTM 430
Were Sound Powered Jackboxes improperly labeled, corroded, damaged, or missing parts?	NSTM 430-3.2
(INSPECT) LIGHTING	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Were darken ship switches operative and adjusted properly?	NSTM 330-3
Were light fixtures, guards, and covers securely mounted?	NSTM 300-4
Were over-sized lamps installed in lighting fixtures?	NSTM 330-2
Were light fixtures missing lenses, protective guards, or faceplates?	NSTM 330-2
Were spray-tight fixtures adequately protected against water intrusion?	NSTM 300-4
Did diesel module room have adequate lighting?	GSO 331B/332E
(INSPECT) BATTERY LOCKERS	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Was a Battery Log maintained?	NSTM 313-2 GSO 313F
Is there an electrical interlock between exhaust ventilation and battery charger?	5100.19C C0904 NSTM 313
Test ventilation interlocks	3131/S-2
Are Alkaline and Lead Acid Batteries being serviced in the same facility?	5100.19 C0904 GSOF
Is each locker provided with: - Rubber Gloves and Aprons. - Goggles. - Two battery fillers. - Two battery test sets. - One soda water container.	5100.19 GSO 313F NSTM 313
Does the locker contain an eye wash station and a deluge shower?	NSTM 313-2

(INSPECT) BATTERY LOCKERS (CON'T)	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Are battery storage racks greater than 12 inches between tiers?	GSO 313F
Were battery hold-down clamps provided?	GSO 313F
Are Acids stored in appropriate protective containers?	GSO 313F
Are battery charger plugs and jacks marked NEG. and POS.?	GSO 313F
(INSPECT) MISCELLANEOUS EQUIPMENT	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Is permanently mounted electrical equipment hardwired to the ships electrical system?	NSTM 330-1
Is hardwired electrical equipment permanently mounted?	NSTM 330-1
Was more than 1 multi-purpose power strip connected to one isolated receptacle circuit?	NSTM 300-2.7
Is electrical equipment mounted on non-conducted surfaces properly grounded?	3000 / A-5
Were Surge Protectors of the approved type?	3000 / A-4R
Are portable electric device power cords properly tinned?	3000 / Q-1R
Are permanent-type safety precautions, operating instructions, high voltage warning signs, and resuscitation instructions installed where required?	NSTM –H.5, I-2
Did electrical connection boxes have knockouts pushed in leaving access holes In the side?	NSTM 300-2.
Are non-watertight connection boxes being used in engineering spaces?	GSO 300D
Was rubber matting oil soaked, cracked, punctured, perforated or had imbedded metal or conductive particles?	GSO 634B

(INSPECT) MISCELLANEOUS EQUIPMENT (CON'T)	
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**
Did dress ship lights have broken, missing, or incorrect guards?	NSTM 330-1 3000/ R2
Were dress ship light receptacles labeled "Dress Ship Light Streamers. Not to be used for any other purpose"?	NSTM 330-1-
Were panel switches controlling circuits that are de-energized during darkened ship operation marked DARKENED SHIP?	NSTM 330-1
Had the float charge on the UPS batteries been reduced from 135vdc to 129vdc?	IAW PMS
Was UPS electronic cabinet bottom sealed to prevent water of oil entry from lower level engine room?	GS0 300D/324D NSTM 300-4

ELECTRICAL (EL)
POST-UNDERWAY
DDG 51

	OPEN AND INSPECT AS REQUIRED BY THE INSPECTION
COMPONENT/SYSTEM	**PROPOSED PROCEDURE**

MAIN PROPULSION (MP)
PRE-UNDERWAY PHASE
DDG 51

2340	MAIN ENGINES
Component/Sub-Component	Proposed Procedure
Test Blow in Doors	2513/007 (S-9)
Test GTM Fire Extinguishing System - Halon/C02 Bottles - Conduit/actuation cables - Hoses/fittings/check valves - Time delay	2521/051 (S-9) 5553/001 (S-2R)S-9 2521/051 (S-4)
Inspect Gas Turbine - Gas Generator Assembly - Power Turbine Assembly - Transfer Gear box and components - Bleed Air Manifold	EOP GTMI GGTB 17, REV A S96430-AE-TED-010
Inspect Base Enclosure Interior/Exterior and bonding /grounding straps	2340/004 (R-20) 2340/004 (R-26)
Verify all technical directives have been installed	GTB/MGTESR
Inspect LOSCA	EOP SOLA
Instruments, gauges and thermometers	JFMM VOL 4
Inspect Intake Dirty Side Inspect Intake Plenum Inspect Bell Mouth Screen	2513/004 (S-7) MLOC NSTM 234
Inspect Demister Pads/Gaskets/Frames Inspect Intake (Silencer level)	2513/007 (S-7) 2340 (R-12)
Conduct LP Air Start and GTM Idle Checks	EOP CAMS
Conduct HP Air Start and GTM Idle Checks	EOP CAMS
Conduct Methanol Test	NSTM 262-5.4.2.1

2411	REDUCTION GEARS
Component/Sub-Component	Proposed Procedure
Test Shaft Turning Gear	EOP MRTG
Test GTM PT Brake Assemblies	EOP CMSI 2411 24M-2 M-1R
Inspect Lube Oil Condition/sump level	2000/001 (R-1)
Inspect MRG Interior - Gear Teeth contact/condition - Lube Oil Spray Pattern - Casing Interior - Attached LO Pump Angle Drive Gear - Attached CRP Angle Drive Gear - SSS clutch Manual Lock-out Mechanism operation - Power Turbine Break Piston Travel - Input Shaft Seals	2411 (A-5) NSTM 241
Inspect Oil Flow in SFI's	NSTM 241
Instruments, gauges and thermometers	JFMM V4
Inspect Casing Exterior	NSTM 241
Inspect Vent Fog Precipitator	EOP RGVS
Inspect Dehumidifier	EOP RGVS
Inspect Security Devices	NSTM 241-4.2.3
Inspect Flange Shielding	NSTM 505
Inspect Piping Systems	NSTM 505

2441	LINE SHAFT BEARINGS
Component/Sub-Component	Proposed Procedure
Inspect Lube Oil Condition/sump level	2000/001 (R-1); MLOC
Inspect Sump Drain Valve	2000/001 (R-1); MLOC
Inspect Seals	NSTM 244-2.6.30
Instruments, gauges and thermometers	JFMM V4
Inspect Lubricator	EDORM
Inspect Dip Stick	EDORM
Inspect Lock Wires	EDORM
Inspect Bearing Depth Micrometer Surface	EDORM
Inspect Foundation	EDORM

2400	STERN TUBE SEALS
Component/Sub-Component	Proposed Procedure
Test Cooling Water Low Flow Alarm	2411/018 (S-1)
Test Inflatable Seal	2400 (S-2)
Instruments, gauges and thermometers	JFMM V4
Inspect Cooling Water Piping	NSTM 505
Inspect Cooling Water Strainer/Filter	EOP STCW
Inspect LP Air Supply	NSTM 505
Inspect LP Piping/Hoses/Fittings	NSTM 505
Inspect CO2/N2 Bottles/Piping/Fitting	2400/013 (24M-3R)
Inspect Emergency Flax Packing Kit	NSTM 244
Inspect Backing Ring	NSTM 244

2451	CRP SYSTEMS
Component/Sub-Component	Proposed Procedure
Inspect CRP Head Tank	EDORM
Verify Calibration between Consoles and OD box	EOP CPPT
Test Slew Rate	EOP CPPT
Test Command Pitch Mismatch Alarm	EOP EOT
Test Emergency Pitch Pump	SEAH
Inspect HOPM - Flex Hoses - Piping - Instruments, gauges and thermometers - Flange Shields	EOP CPPC 2451/006 (24M-1R) NSTM 505 CRL
Inspect Electric CRP Pump - Motor - Controller - Pump - Mechanical Seal - Instruments, gauges and thermometers - Flange Shields	EOP NSTM 503-5.3.8.1.2. 2451 R-11
Inspect Oil Condition	2451/006 (R-1W)
Inspect Attached CRP Pump - Inspect Mechanical Seal	NSTM 503-5.3.8.1.2.

2620	LUBE OIL SYSTEMS
Component/Sub-Component	Proposed Procedure
Test MRG Lube Oil Sequencing	2620/013 (S-2)
Test/Inspect Lube Oil Strainer	EOP LODS
Test Lube Oil Purifier and Heater	EOP LOPO
Inspect Electric MRG Lube Oil Pump - Motor - Controller - Pump - Mechanical seal - Piping /flex hoses - Relief valves - Instruments, gauges and thermometers - Flange Shields	EOP CLOP 2451/006 (24M-1R) NSTM 503-5.3.8.1.2. NSTM 505 JFMM V4
Inspect Attached MRG Lube Oil Pump - Mechanical seal - Piping/flex hoses - Relief valve - Instruments, gauges and thermometers - Flange Shields	2451/006 (24M-1R) NSTM 503-5.3.8.1.2. NSTM 505 CRL
Inspect Temperature Regulating Valve	LOSRG
Inspect Unloading Valve	LOSRG
Inspect Lube Oil Purifier - Motor - Controller - Piping/flex hoses - Relief valve - Instruments, gauges and thermometers - Flange Shields	2451/006 (24M-1R) NSTM 503-5.3.8.1.2. NSTM 505 CRL

2610	FUEL OIL SYSTEMS
Component/Sub-Component	Proposed Procedure
Test Fuel Oil Pump Logic Sequencing Circuitry	2610/059 (S-12)/FOTG
Test Service Tank Suct/Recirc Valves	EOP CFOP
Test Quick Closing Valves	EOP CFOP
Test Coalescer Filter Shift Points	
Test GTM Fuel Oil Solenoid Trip Valves	EOP CFOP
Inspect Booster Pumps - Motor - Controller - Flexible coupling - Mechanical seal - Piping - Relief valves	EOP CFOP 2451/006 (24M-1R) NSTM 503-5.3.8.1.2. NSTM 505
Inspect fuel oil service heater	2610/059 (A-9)
Inspect instruments, gauges and thermometers	JFMM V4

2521	CONTROLS
Component/Sub-Component	Proposed Procedure
Test PACC Alarms and Indicators	EOP CPPT
Test PLCC Alarms and Indicators	EOP CTAI
Test EOT Wrong Direction Alarm	EOP EOT
Test PACC on UPS	2521/051 (A-12)
Inspect PACC instruments	JFMM V4
Inspect PLCC instruments	JFMM V4
Inspect Torsionmeter calibration	JMM V4
Inspect 800 Group Print	EOP CPSA; 2451 R-1W
Inspect and Test Bell	EOP CPSA; 2451 R-1W

	HULL STRUCTURE
Component/Sub-Component	Proposed Procedure
Bilges	NSTM 631; MLOC
Deck Plates	EOP MLOC
Equipment Foundations	NSTM 631
Pipe Brackets/Hangers	NSTM 505
Paint and Preservation	NSTM 631

5516	BLEED AIR SYSTEMS
Component/Sub-Component	Proposed Procedure
Test Motor Air Reg valve	5000/005 S-6
Test Masker Air Transfer Valve	5000/005 S-6
Test Mixing Bypass valve	5000/005 S-6
Test PRAIRIE Air Cooler inlet valve	5000/005 S-6
Test GTM 16th Stage Bleed Air valves	5000/005 S-6
Test GTG 14th Stage Bleed Air valve	5000/005 S-6
Test GTG Start Air Cooler inlet valve	5000/005 S-6
Test HP Start Reg valve	5000/005 S-6
Inspect GTM Bleed Air Reg valves	5000/005 S-6
Inspect GTG Bleed Air Reg valve	5000/005 S-6
Inspect Prairie Air Roto Seal	5000/005 S-6
Inspect Flex hoses	5000/009 A-2
Inspect GTG Start Air Cooler	EOP CBAM
Inspect instruments, gauges and thermometers	JFMM V4
Inspect Piping/Fittings	NSTM 505
Inspect Masker Air Cooler	BMPA
Inspect Masker Air Cooler relief vlv	BMPA
Inspect Prairie Air Cooler	BMPA
Inspect Prairie Air Cooler relief vlv	NSTM 505
Inspect drain orifices	NSTM 505

	FUEL OIL XFER SYSTEMS
Component/Sub-Component	Proposed Procedure
Test/operate Fuel Oil Purifier	EOP RSFT
Inspect Transfer Pumps - Mechanical seal - Piping/flex hoses - Relief valves - Flange shields	EOP FOPO 2451/006 (24M-1R) NSTM 503-5.3.8.1.2. NSTM 505
Inspect fuel oil transfer heater	EOP FOPO
Test Motor Operated Valves	5000/001 A-1
Inspect fuel oil transfer and ballast consol	EOP CAF
Test Local Fuel Control Console Alarms and Indicators	
Inspect instruments, gauges and thermometers	JFMM V4

	GAS TURBINE GENERATORS

Component/Sub-Component	Proposed Procedure
Test operation of RPM and temperature circuits Test Fire detection and protection circuitry Test LOCOP Alarms and Indicators Test speed pickup	3113/004 (R-20) S9234-BC-MMO-010
Test blow-in door automatic operation	3431/002 (S-5); MLOC; NSTM 234
Inspect Turbine Enclosure - Compressor - Accessory Gear box - Diffuser Case - Combuster - Bleed Air Manifold - Electrical Wiring and Cables - Thermocouple harness and junction box - 5th and 10th stage bleed air valves - Elastomers - Engine side mounts - Enclosure Exterior - Enclosure Interior	3113/006 (24M-2R/R-9) EOP GTGI GGTB 17 3431/002 S-5 3113/004 R-12
Inspect Reduction Gear Enclosure - Electrical Wiring and Cables. - Reduction gear vent piping - PTO shaft housing speed pick-up - Reduction gear lube oil sump level - Starter	EOP GTGI
Inspect Fire Fighting System - C02 Bottles - Conduit/actuation cables - Hoses/fittings/check valves	5531/026 M-1
Inspect/shift duplex seawater cooling strainers	EOP STCW; 3431/002 Q-8R
Verify Engine lube oil sump level (23699)	2000/001 (R-1)
Inspect Module Mounts	GGTB 10 REV 1 AMED. A
Inspect GTG Flex Hoses	GGTB 6 REV 1
Inspect instruments, gauges and thermometers	JFMM V4
Start GTG Verify all Start/Operating limits - Inspect thermocouple spread and average monitor	GTGMS
- Verify MG directive installed. New Fuel nozzles installed with air alt.	YES NO
- Verify if FADAC installed.	YES NO
INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS)	
Component/Sub-Component	Proposed Procedure
Verify operational status of each workstation	

Verify number of required portable data terminals (PDT) and that they are operational	
Verify number of required portable diagnostic aids (PDA) and that they are operational	
Are any critical system errors shown in the system log?	
Ensure data for at least two routes from actual rounds	
Ensure data from Data Acquisition devices is being received as required	
Verify Demand Data is received and processed accurately	
Verify database data is received and processed accurately	
Ensure router connections are operating properly	
Ensure remote demand data and database data are available to be viewed.	
Verify all required system links are available	
Verify all ICAS printers are operational	
Verify picture book is available for vibration checks	
Verify vibration data is being taken per PMS	
Verify vibration disc are installed on all equipment	
Conduct vibration surveys on selected equipment during the full power demonstration	
Inspect all cabinet air filters	
Inspect all ICAS computer equipment	
Inspect computer internal shocks and fans	

RMISS CHECK LIST	REF/Setting
N1 Overspeed Shutdown (RPM)	**53500**
N2 Backup (external) Overspeed (RPM)	**53500**
N2 (NPT) Overspeed Shutdown (RPM)	**34500**
MGT TOT Backup Overtemp Shutdown	**1550 deg F**
MGT TOT Overtemp Shutdown	**1550 deg F**
RIMSS SHUTDOWNS	**PRELIMINARY PMS CARD**
N2 OVERSPEED SHUTDOWN	***34,500 (+/-) 200 RPM***
SLOW START FAIL TO REACH 27500 RPM	***REACH 27500 WITH 30 SEC***
N2 ROTATION FAILURE SHUTDOWN	***15 SEC AFTER 44,050 RPM***
N1 UNDERSPEED	***27,550 (+/-) 200 RPM***
N1 MAGNETIC PICKUP FAIL SHUTDOWN	***VERIFY INDICATION***
MGT OVERTEMP/EXTERNAL OVERTEMP	***1550 DEG***
MGT T/C FAILURE	***VERIFY INDICATION***
FLAMEOUT	***15 SEC AFTER N1 REACHES 6120 RPM***
RUN LUBO PRESS LOW	***60 (+-) 5 PSIG***
MOTOR LUBO PRESS LOW	***10 PSIG 3 SEC AFTER MOTOR IS INITIATED***
FULE VLV POSITION ERROR	***N1 SPEED 10,000 "FUEL VLV POS ERROR WITH 10 SEC AFTER N1 INCREASE***
EXHAUST DAMPER CLOSED	***VERIFY SHUT***
HIGH TORQUE	***116 (+-) 10 PSIG***

MAIN PROPULSION (MP)
UNDERWAY PHASE
DDG 51

FULL POWER AND QUICK REVERSAL DEMONSTRATIONS	
Demonstrate Auto Plant Mode Logic (Split plant to Full Power)	EOP CSSF
Demonstrate Full Power ahead (1 hour)	2340/004 (R-9) EOSS/POG/9094.1B
Demonstrate Quick Reversal Astern	POG/Full Power Memo/EOSS
Demonstrate Quick Reversal Ahead	POG/Full Power Memo/EOSS
LUBE OIL PURIFIER DEMONSTRATION	
Demonstrate purifier operation	EOP LOPO
FUEL OIL TRANSFER DEMONSTRATION	
Demonstrate fuel oil purifier (s) operation	EOP FOPO
Demonstrate purifier (s)emergency stop capability	EOP FOPO

PRAIRIE/ MASKER/BLEED AIR SYSTEM DEMONSTRATIONS	
	Proposed Procedure
Verify operation and calibration of all gauges and instruments	JFMM V4
Test GTM and GTG check valve operation	EOP BSAA, 5516 (24M-1R)
Measure masker air flow rates to emitter belts in MER 1 and MER 2	5516/004 R-2Q
Measure Prairie air flow rates in MER 1 and MER 2	5516/004 R-2Q
Measure masker air flow rates to main strut fairwater and main strut rope guard	5516/004 R-2Q